APPENDIX A

Etreby Computer Company

ApotheCare® 2000
User's Guide

Version 1.1.0
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Etreby Computer Company, Inc.
2145 West La Palma Avenue
Anaheim, CA 92801
(714) 533-1308 or (800) 292-5590

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Getting Started

The Etreby ApotheCare 2000 is a clinical information resource and documentation system designed to facilitate the provision of pharmaceutical care and disease management by pharmacists in a variety of practice settings. It is designed to be fully functional with or without an interface to a dispensing software. ApotheCare 2000 addresses all the structural elements and the various processes required to assist pharmacists in their quest for transforming the concept of pharmaceutical care into an actual practice model.

System Requirements

- Personal computer with Pentium micro processor
- 16 MB of RAM
- 200 MB of hard disk space
- Windows 95 or Windows NT Workstation 4.0 or later
- VGA monitor
- Laser printer (compatible with HP Laser Jet 4)
- Modem 33.6K or faster

Installing ApotheCare 2000

1. Place the program CD in the CD-ROM drive of your computer.
2. Click the Windows **Start** button and then select **Run.**
3. Type **d:\setup** (Select a different letter for your CD-ROM drive if applicable).
4. Click on OK.
5. Follow the installation instructions on the screen.

Running the Program

☞To run ApotheCare 2000, you must have the program CD in the CD-ROM drive of your computer. Otherwise, the program will not run.

- Click on Windows Start, go to Programs and select ApotheCare 2000.
- The first time you run the program, you will be prompted for a User ID. Enter the ID that is written on the CD cover.

General Operational Conventions

The ApotheCare 2000 program uses windows 95/NT user interface standards. The following are a few operational conventions used throughout the program that you need to be familiar with:

- Unless otherwise specified, the navigation icons ☜ (previous) and ☞ (next) are provided on most screens to allow you to browse through the existing similar forms for a selected patient.
- In several screens, you will see a fractional number, usually at the bottom of the screen, sometimes near the top. The denominator of this number indicates the total number of forms for the selected patient. The numerator indicates the number of the current form. For instance, on the HCFA screen, the number 3/10 indicates that this is HCFA form #3 out of a total of 10 forms for the selected patient. When you are on the most recent form and create a new one, the numerator becomes the number of the denominator plus 1, e.g. 11/10. When you save the new form, the denominator will be incremented by one.
- To edit an existing form, display the desired form using the navigation icons, click on Edit, if there is one on the screen, make the changes and click on Save.
- On several of the forms that are attached to a patient, such as the HCFA form, if the screen is already open and the patient already selected, you can create a new form for the selected patient by clicking on Add or New, whichever is available on the screen.
- If you make changes on a screen and click on the navigation icons before saving the changes or try to print a form or a report, you will be prompted to save the changes first.
- On the screens that contain a database grid, each line represents a record in the corresponding table. You can save the changes you make to each grid line by either clicking on Save or more conveniently by simply exiting the line. You can exit the line by either using the up or down arrow key or by clicking on the mouse on another line. This will automatically save the record.
- To create a new record in a grid, go to the last line and press on the down arrow.
- You can navigate through fields on the screen by either pressing on <tab>, pressing the arrow keys or using the mouse.

Year 2000 Compliance

The program is fully compliant with the new century. If the year is entered in the short format, the program defaults it to the current century. However, you can enter a year from a different century by entering it in the long format. For example, if you enter "98", the program defaults it to "1998". If you want to enter the year "2002", you must enter it as "2002". If you enter "02" only, it will be defaulted to 1902. In either case, the number of years, months, and days between any two dates is calculated correctly. To see how this feature works:

1. Choose **Help | Year 2000 Compliance.**
2. The current date defaults to the system's date, but you can enter another date.
3. Enter a birth date (or any other date, past or future) and press <Enter>.
4. The age or span of time is instantly calculated.

ApotheCare 2000 Databases

The program allows you to examine, update, add, or delete records in the following databases:

- Patient
- Doctor
- Drug
- Insurance
- Facility
- Appointments

Printing a Database

1. Choose **File | Database Print.**
2. Select the database from the list.
3. Enter the starting and ending name for which you want to print. Leave blank both fields if you want to print the entire database.
4. Click on **Print.**

Patient Database

To access the Patient database, choose **File | Open Database | Patient** or click on the  button in the tool bar.

Adding a New Patient

1. You can enter a new patient in the "**Patient**" field in three ways:
   - Enter the patient's last name.
   - Type a comma "," followed by the patient's first name.
   - Enter the patient's ID number.
3. A list of the current patients in the database will appear. Press **<ESC>**.
4. Click on **OK** when asked if you want to add a new patient. You may be able to import the patient from the pharmacy program. See the section on importing.
5. Fill out the fields on the screen.
6. Click on **More Info** and fill out the applicable fields (See section on More Info).
7. Click on **General Health** and fill out the applicable fields (See General Health).
8. Click on **Save** to save the patient or **Cancel** to start over.

Importing Patients from the Etreby 2000 Pharmacy Program

If you are running the integrated version of the ApotheCare-2000 program that is interfaced with Etreby 2000 pharmacy system, you have the option of importing the new patient from the pharmacy data as explained below:

1. When entering a new patient in ApotheCare, you will be prompted to import the patient data from the pharmacy system. Click on **Yes** if you want to import, **No** if you do not.
2. If you choose to import and there is a matching patient available in the pharmacy database, you will be prompted with a list of patients who match what you entered in the patient field. Otherwise, you will get a prompt informing you that the program did not find a matching patient in the pharmacy system.
3. If there is a list of matching patients, select the desired patient and click on **OK**.
4. The patient's relevant data including demographic information, diagnosis and allergy information will be automatically imported into the program, making the patient part of the ApotheCare-2000 patient database. You can then access this patient later from any other part of the ApotheCare 2000 program. Refer to the section on "Interface with Etreby 2000 Pharmacy System" in the Tools chapter for more details.

Displaying or Updating an Existing Patient

1. You can search for an existing patient in three ways:
   - To search for a patient by last name, enter all or a portion of the patient's last name.
   - To search by first name, type a comma "," followed by all or a portion of the patient's first name. The drop down list will be formatted such that the first name appears in the first column.
   - To search by patient's ID number, type in the ID number. The first column of the drop down list will display the ID numbers.

     As you type a string in the patient field, the highlight will go to the first record on the list matching the string entered.
2. Select the desired patient from the list.
3. To update the patient, click on **Edit**, make the necessary changes and click on **Save**.

Selecting a Patient on Other Screens

1. In the "**Patient**" field of the screen, enter all or a portion of the patient's last name. Only if you are in the Patient database, can you also access patients by their first name or id number.
2. A list of current patients in the database matching the specified last name will appear.

☞ If there is no matching name on the list and you are on a screen other than the

Patient screen, you cannot select this patient. You must first go to the patient database to add the new patient before you can select it from the list on the other screens.

3. Click on the desired patient.

☞ If a patient has already been selected on another screen that is still open, that patient will automatically appear in the patient field of the new screen and you do not need to select it again.

More Patient Info

This screen has four tabs containing information in the following areas:

- Diagnosis
- Emergency Info
- Insurance Coverage
- OTC/Allergy Profile

When you are finished entering the information, click on **Save** to save the changes or **Cancel** to undo.

Diagnosis

This screen displays the patient's known disease states/diagnoses.

To add a diagnosis to the patient:

1. Press the arrow down key while at the last diagnosis in the grid or press on the **Insert** key anywhere in the grid and a new line will appear in the grid.
2. Enter a new diagnosis in one of the following ways:

   - By ICD9 code:

     Enter the first one or more digits of the code and select the diagnosis from the drop down list.

   - By description:

     Enter the first one or more letters of the description and select the diagnosis from the drop down list.

To remove a diagnosis:

1. Place the cursor in the diagnosis line.
2. Press **<Ctrl-Delete>** or click on the **Delete** button on the screen.
3. Click on **OK** when asked if you want to delete the record.

Emergency Info

Fill out the demographic information on the responsible party, care giver and emergency contact.

Insurance Coverage

In the Primary screen, enter the applicable information for the primary medical insurance carrier. In the insurance field, click on the scroll bar and choose an insurance company from the drop down list. If there is a secondary medical insurance, click on Secondary tab and fill out the applicable fields.

☞ Prescription benefit cards do not apply here.

OTC/Allergy Profile

To select an OTC drug:

1. Enter the first one or more letters of the drug name and press on Tab.
2. A list of drugs will appear beginning with the letters you specified in the previous step
3. You can search by therapeutic cross-reference number by placing the cursor in the code field.
4. Once you find the drug you are looking for, double click on it and it will be automatically added to the table.

To select a class of drugs for allergy:

Select a class of drugs in the same manner as selecting an OTC drug above.

☞ You should select a class of drugs for allergies rather than a specific drug for best identification of potential problems.

Examples: Choose 01- Penicillin, rather than 01200006 - Amoxicillin.

Facility Information

1. In the Facility field, select a facility from the drop down list.
2. Enter the Room Number and Date of Admission in the corresponding fields on the screen.
3. Click on **Save** to save the facility information or **Cancel** to start over.

General Health

There are four tabs in the General Health screen, which contain information about the patient in the following areas:

- General
- Illnesses
- Systems Review
- Vital Signs/Lab. Values

When you are finished with entering the information, click on **Save** to save the changes or **Cancel** to start over.

General

1. Enter as much information as needed about the patient's diet, social history and lifestyle.
2. Enter up to 15 characters about the patient's alcohol, tobacco and caffeine consumption.

Illnesses

Enter as much information as needed about the patient's past and current illnesses.

Systems Review

It displays in the right panel a selection list of symptoms/conditions arranged according to physiological systems.

- To add a symptom/condition as an existing condition:

  Drag and drop a symptom/condition on the selection list from the right panel to the left panel or double click on it and it will be added to the left panel.

- To remove an existing symptom/condition:

  Drag and drop an existing symptom/condition from the left panel to the right panel or double click on it.

Vital Signs/Lab. Values

Fill out the fields containing information about the patient's vital signs and lab data.

- The normal range values appear at the bottom of the page or in a pop up box momentarily when the cursor is placed in the field.
- Values outside of the normal value range appear in red after they are entered.
- Values for tests other than those listed may be added in the box at the bottom left.
- These values should serve as a baseline: Ongoing monitoring of specific disease-related measurements can be better managed through the use of the patient care plan and clinical outcomes.

Doctor Database

To access the doctor database, choose **File | Open Database | Doctor** or click on the  button in the tool bar.

Adding a New Doctor

1. In the doctor field, enter all or a portion of the doctor's last name.
2. A list of the current doctors in the database will appear. Press **<ESC>**.
3. Click on **OK** when asked if you want to add a new doctor.
4. Fill out the fields on the screen.
5. Click on **Save** to save the new doctor record or **Cancel** to start over.

Displaying or Updating an Existing Doctor

1. Follow steps 1 - 2 above.
2. Select a doctor from the drop down list.
3. To update the doctor, click on **Edit**, make the necessary changes and then click on **Save**.

Selecting a Doctor on Other Screens

1. In the doctor/physician field of the screen, enter all or a portion of the doctor's last name.
2. A list of current doctors in the database will appear. As you type in a name, the highlight will go to the first record on the list matching the string entered.

☞ If there is no matching name and you are on a screen other than the doctor's screen, you cannot select the doctor. You must first go to the Doctor database to add the new doctor before you can select it from the list on the other screens.

3. Click on the desired doctor.

Drug Database

To access the Drug database, choose **File | Open Database | Drug** or click on the  button in the tool bar.

Adding a New Drug

1. Drugs can be entered in two ways: by drug name and by the therapeutic cross-reference (TXR) number. In the drug field, enter a portion of either the drug name or the therapeutic cross-reference number.
2. A list of the current drugs in the database will appear. Press **<ESC>**.
3. Click on **OK** when asked if you want to add a new drug.
4. Fill out the fields on the screen. You need to use a DUR manual to obtain the TXR numbers.
5. Click on **Save** to save the new drug or **Cancel** to start over.

Displaying or Updating an Existing Drug

1. Follow steps 1 - 2 above.
2. Select the desired drug from the drop down list.
3. To update the drug, click on **Edit**, make the necessary changes and then click on **Save**.

Selecting a Drug on Other Screens

1. In the "**Drug**" field of the screen, enter all or a portion of the drug name. Only if you are in the Drug file, can you also access the drug by TXR number in addition to the name.
2. A list of current drugs in the database will appear. As you type, the highlight will go to the first record on the list matching the string entered.

☞ If there is no matching drug on the list and you are on a screen other than the drug screen, you cannot select this drug. You must first go to the drug database to add the new drug before you can select it from the list on the other screens.

3. Click on the desired drug.

Insurance Database

To access the Insurance database, choose **File | Open Database | Insurance** or click on the 

button in the tool bar.

Adding a New Insurance Plan

1. Enter all or a portion of the plan name.
2. A list of the current insurance plans in the database will appear. Press **<ESC>**.
3. Click on **OK** when asked if you want to add a new plan.
4. Fill out the fields on the form.
5. Click on **Save** to save the new plan or **Cancel** to start over.

Displaying or Updating an Existing Insurance Plan

1. Enter all or a portion of the plan name.
2. Select an insurance plan from the drop-down list.
3. To update the plan, click on **Edit**, make the necessary changes and then click on **Save**.

Facility Database

This database enables you to record the facility where the patient resides at.

To access the facility database, choose **File | Open Database | Facility.**

Adding a New Facility

1. Enter all or a portion of the plan name.
2. A list of the current facilities in the database will appear. Press **<ESC>**.
3. Click on **OK** when asked if you want to add a new facility.
4. Fill out the fields on the screen.
5. Click on **Save** to save the new facility or **Cancel** to start over.

Displaying or Updating an Existing Facility

1. Enter all or a portion of the facility name.
2. Select a facility from the drop-down list.
3. To update the facility, click on **Edit**, make the necessary changes and click on **Save.**

☞ To add a facility to the patient profile, see the section on Facility Information in Patient Database.

Appointments

To access the Appointments database, choose **File | Open Database | Appointments** or click on the  button in the tool bar.

- The appointment screen will display the appointments for today's date (as set in the system configuration). The appointments are in half hour intervals from 8 a.m. to 10 p.m.
- You can enter a new appointment at the appropriate time or edit or delete an existing appointment. You may also search for an appointment for a specific time, person, reason or type of visit.
- To print the daily appointments, click on **Print.**
- To view appointments for another day, click on the scroll arrow in the "**Date**" field and then click on the desired day on the calendar that drops down.
- To view all your appointments, click on **View All.**

Entering a New Appointment

1. If you are viewing your daily appointments, go to the time slot for the appointment you want to enter.
2. If you are viewing all your appointments, enter the date and time of the appointment in the corresponding columns. The time must be entered in this format: hh:mm (you must type in ":"). If you don't type AM or PM after the time, it will be defaulted to AM when you exit the column.
3. Select a patient in the Patient column.
4. Once a patient is selected, the cursor moves to the **"Reason"** field. When you click in this field, a list of the current disease states for the selected patient is displayed. Select one from the list or enter your own text.
5. Enter the **type of visit** by either selecting from the drop-down list or entering your own text.

Deleting an Existing Appointment

1. Find the appointment you want to delete.
2. Put the cursor in any field of this appointment.
3. Click on **Delete.**
4. Click on **Yes** when asked if you are sure you want to delete the record.

Searching for Appointments

The program gives you the capability of searching for a specific appointment(s).

- You have the option of searching by a patient's last name, first name, time, reason or type of visit.
- On the screen where you view all appointments, you may also search by date.
- You can search "By Value," where you specify a partial or complete value for the field you are searching for, or "By Range," where you enter the starting and ending values. When searching by Time, however, you must specify a range of values.
- Multiple search criteria can be specified at a time. For example, you can search for appointments for a patient by the last name of "Johnson" during the month of "January" for the reason of "check up".

1. Click on **Search.**
2. Highlight the field you are searching for in the left panel. In the right panel, either click on the "**By Value**" tab and or click on the "**By Range**" tab to specify the search values.
3. You may print the result of your search by clicking on **Print.**
4. To view all the appointments again, click on **View All.**

Disease Management

Disease management consists of various interrelated activities designed to foster sound clinical decisions. There are four distinct steps in the disease management process for a selected patient. These steps are listed in their logical order as follows:

1. Drug Regimen Review
2. Therapy Assessment
3. Pharmacist Care Plan

The first two steps should be completed in their logical order to facilitate the creation of a care plan that takes into account all the drug and disease-related problems identified by the program. As each step is completed, a pop-up will appear, suggesting the next logical step in the disease management process.

Drug Regimen Review

Drug Regimen Review is the first phase of the disease management process and involves identifying or listing the patient's existing drug regimen. It is absolutely essential to perform a thorough review in order to develop well-informed solutions to drug-related problems.

To access the Drug Regimen Review screen, choose **Disease Management | Drug Regimen Review.**

Creating the First Drug Therapy

1. Select a patient.
2. If you have the Etreby 2000 Pharmacy System and the patient exists there, you can import the Rx history of the patient here as follows:
   - Click on **Pharmacy History.**
   - A selection list of pharmacy patients appears to confirm the entered patient.
   - Once the patient has been selected, a selection window appears displaying the list of prescriptions for the selected patient including the OTC drugs.
   - Select one or more prescription(s) and click on **OK.** To select more than one, press on **<Ctrl>** and highlight the desired prescriptions. To select a range, press on **<Shift>** and highlight the first and last desired drug.
3. To enter a new medication, put the cursor in the drug field and select a drug.
4. A diagnosis pick list will appear. You may make a selection to indicate the condition for which the medication is prescribed. The list is presented in a format whereby the most commonly used diagnosis is listed first. The system will try to match these

diagnoses with the patient diagnosis profile and will highlight the best-matched diagnosis. In order to assure the diagnosis that you select is correct, we suggest you contact the prescriber. Utilizing an improper ICD9 code may prevent payment for services rendered. Select one from this list or Cancel.

☞ The diagnosis selected here will automatically be added to the patient's diagnosis profile, if it was not already there.

5. Enter an RX # if applicable.
6. Enter the last Fill Date, if applicable.
7. Enter the daily dose and the units that the patient is taking. For example, if the patient is taking two capsules 250 mg a day, enter the dose as 500 mg.
8. Enter the quantity dispensed
9. Enter the quantity remaining.
   - The last fill date, quantity dispensed, and quantity remaining fields are for the purpose of assessing patient compliance. If compliance is not an issue in the assessment, or the information can not be obtained, these steps may be ignored.
   - If the last fill date, quantity, daily dose and quantity remaining fields are completed, the compliance rate for a particular medication will be calculated when you click on **Save** or exit the medication line. A percentage over 100% indicates over usage, a percentage under 100% will indicate under usage.
10. Click on **Drug Use Evaluation** to evaluate the drug therapy you just entered.
11. The **Diagnosis** button gives you the capability of viewing the diagnosis that was selected to be treated by the highlighted drug.
12. When you click on X to exit the screen or right click on the mouse, a pop up will appear, with Drug Use Evaluation in bold. You may, however, choose another task.

Adding More Drug Therapies

1. Select a patient.
2. The last drug therapy will be displayed.
3. You can copy any of the drugs in the patient's previous therapies and use them in the new therapy. Follow the steps below:
   - Go to the existing therapy that you want to copy the information from by using the navigation icons at the top right corner of the screen.
   - Select the drug(s) you want to copy.

☞ To select more than one drug, use the Windows 95/NT convention of highlighting more than one selection by using the **<Shift>** or **<Ctrl>** keys combined with clicking on the desired selections. The **<Shift>** key allows you to select a range of lines from the last line highlighted till the line that you click on, while the **<Ctrl>** key allows you to skip the lines between the last line highlighted and the line you click on.

- Click on **Copy Therapy** at the bottom of the screen.
- If you have not yet created a new therapy screen, go to the most recent therapy screen and click on ☞. This will create a new therapy.
- Click on **Paste Therapy** and the drug(s) from the previous therapy will be displayed on the new therapy screen.
- You will need to enter the new Remaining Qty as it will not be copied.
- Adjust the data as needed, e.g. daily dose.

3. Follow steps 3 - 12 from "Creating the first drug therapy" above.

Editing an Existing Drug Therapy

☞ You can edit an existing therapy only if the review date is the same as the system's date. The previous therapies are read-only. However, in the event that you have made a mistake in a previous therapy and need to make a correction, see the section on how to edit a therapy from a previous date.

1. Choose **Disease Management | Drug Regimen Review.**
2. Select a patient.
3. Click on the navigation icons at the top right corner of the screen to display the desired therapy.
4. Highlight the desired entry, click on **Edit** and make the necessary changes. To delete a medication, place the cursor in the line representing the medication record you want to delete. Click on **Delete** and click on **Yes** when asked if you want to delete the record.

Editing a Drug Therapy From a Previous Date

☞ Beware that any changes here may change the previous drug use evaluation and therapy assessment reports.

1. Change the system's date to the review date.
2. Display the desired review as described above.
3. Make the necessary changes and save as before.
4. Change the system's date back to today's date.

Drug Use Evaluation

The powerful clinical databases of the ApotheCare 2000 match the patient's drug therapy against his/her medical conditions or existing disease states. It also automatically screens for drug-disease contraindications, drug allergies, dose irregularities, therapeutic duplications, potential drug-drug interactions, untreated medical conditions and evaluates patient compliance where possible. The results of this clinically intensive process are produced instantaneously.

The drug use evaluation is done based on the patient's allergy/diagnosis profile when the drug therapy was done. However, the reevaluation can be done based on the current patient allergy/diagnosis profile.

- You have the option of viewing the following information by pressing on the corresponding button at the bottom of the DUE screen:
  - **Allergies** -- checks to see if the patient has an allergic reaction to any of the drugs he/she is taking.
  - **Interaction** -- displays information about potential drug-drug interaction caused by the patient's current drug regimen. You can navigate through multiple interactions.
  - **Dosage** -- checks the prescribed dose for each drug versus the recommended dose. You will get a message if the dosage is below or above recommended dosage.
  - **Contra-indications** -- checks all drugs the patient is taking against all disease states in the patient's diagnosis profile.
  - **Therapeutic duplications** -- checks all drugs against each other to see if there are therapeutically equivalent drugs in the patient's regimen.
  - **Untreated medical conditions** -- checks to see if there are any disease states in the patient's diagnosis profile for which there are no drugs prescribed.
  - **Reevaluate** -- reevaluates all the above based on the current patient allergy/diagnosis profile (the initial display is based on the patient allergy/diagnosis profile when the drug therapy was done).
- To print a DUE report, click on **Print.**
- When you click on X to exit the screen, a pop up will appear, with Therapy Assessment in bold. The result of the Drug Use Evaluation will automatically go to Therapy Assessment, where the information can be modified or added to.

Therapy Assessment

The assessment phase spans twelve categories:

- Untreated medical conditions
- Drugs without medical indications
- Dosage, route, frequency, therapy duration
- Therapeutic duplication
- Drug-disease contraindications
- Drug-drug interactions
- Drug allergies/intolerances
- Adverse drug reactions
- Medication safety/efficacy issues
- Patient compliance
- Patient knowledge/education needs
- Social/financial considerations

For each category, there are two memo fields: The one on the left is for the description of problems or patient needs. Problems identified in the DUE process are automatically transferred to the appropriate field. The one on the right is for the pharmacist to address each corresponding problem topic and document actions, comments or recommendations.

After reviewing all Therapy Assessment categories and documenting any pharmacist notes and comments, click on Print button to generate the Therapy Assessment Report. This will serve as a valuable worksheet for constructing the Pharmacist Care Plan or as a tool to communicate with physicians.

☞ The assessment may be performed at a time other than when the drug therapy is entered.

To access the Therapy Assessment screen, choose **Disease Management | Therapy Assessment.**

Using Therapy Assessment

1. Select a patient.
2. To see a previous assessment, click on the navigation icons in the top right corner of the screen. If you need to make any changes, click on **Edit.**
3. There are 12 tabs for twelve categories of assessment.
4. For each category, the patient's needs or problems will be displayed in the left memo field. Enter your actions/recommendations in the right memo field.
5. Click on **Save** when finished or **Cancel** to undo your changes.
6. Click on **Print** to print the report.
7. When you click on X to exit from this screen, a pop up appear with the Pharmacist Care Plan in bold.

Pharmacist Care Plan

The pharmacist care plan is the final phase of the disease management process. A pharmacist care plan is constructed to optimize the drug therapy of a patient and provide a clinical record of the interventions performed. The four main components of the Pharmacist Care Plan are:

- Stating the patient's health care needs/problems.
- Setting pharmacotherapeutic goals.
- Recommending optimal therapy.
- Monitoring outcomes.

A separate care plan may be constructed to address a single high-risk disease state. Another important feature is the ability to create multiple care plans for a patient suffering a multitude of high-risk conditions, with each plan addressing a separate disease state.
To access the Care Plan screen, choose **Disease Management | Pharmacist Care Plan** or click on the  button in the tool bar.

Creating a Template

1. Leave the patient and the doctor fields blank.
2. Click in the "**Disease/Task**" field and select the option "**Create a new care plan**" and click on **OK**.
3. When presented with the "Pick Care Plan" and "Pick Monitoring Parameters" you may choose to **Cancel**, thus leaving this section blank for the time being. A selection from the knowledge base will add those parameters.
4. Enter the title of the disease/task.
5. Proceed to fill in the areas. The Knowledge Base may be accessed to help you do this. You may also establish monitoring parameters at this time. Complete them according to your pre-defined descriptions. It is suggested that you map this area out in advance to minimize the possibility for error.
6. Enter text in the memo fields as desired.
7. For the monitoring parameters, click on the respective tab to go from set to set. Enter the parameters in the appropriate fields. Do not enter the values here for now.
8. You can access the communications library or create an invoice.
9. Click on **Save**.
10. Enter the title of the template.
11. Click on **Yes** when asked if you want to save the template.
12. A window displaying the Template valid values is displayed. Enter the parameter values now.

    Sample entries include:

- Numerical entries: 0, 1, 2, 3...

  Translating numbers into words:

- 1= poor, 2=fair, 3=good, 4= excellent
- 1=yes, 2=no
- 1=never, 2=rare, 3=occasional, 4=frequent
  - Words: Yes, No, Enforced... (Will not be graphed)
- Ranges:
- 2 - 5 mg/dl
- 39 - 49%
- < 200 mg/dl
- > 80%

13. When all values have been entered, click on **OK.**

☞ Do not click on **OK** until all fields have been completed correctly or else you will be unable to make changes in the scales/values used to graph the outcomes data. If you need to make any changes, click on **Undo**, make the necessary corrections and then save.

14. Click on **Save.**

Starting a New Care Plan

1. Select a patient.
2. Select a doctor.
3. When you click in the "**Disease/Task**" field, you will be prompted with Choosing a Care Plan pick list. Select the option to start a new care plan.
4. A Diagnosis Pick List displaying the patient's disease states will appear. Click on a diagnosis and press **OK** or **Cancel.**
5. A second list of pre-defined Monitoring Parameters for different diagnoses from the Knowledge Base will appear. Select one from the list or **Cancel.** If you select a set of parameters, it will populate the monitoring fields on the screen automatically.
6. If you do not select a diagnosis from the list, you will be prompted to enter a new Disease/Task.
7. Enter problems/needs, goals and plan in their corresponding memo fields. The Knowledge Base is an excellent source from which you can copy the information and then paste into these fields. You may also add monitoring parameters of your choice (See Creating a Template).
8. You can start a protocol by clicking on **Protocol** to treat this disease/task.

9. You can prepare a letter to be sent to the patient's caregiver by clicking on **Communicate**.
10. When you are finished entering the information, click on **Save** to save the plan or **Cancel** to start over. If you press on X to exit the screen, you will be prompted to save the plan if you have not already done so.
11. When you save the plan, you will be presented with the invoice screen. Enter the fee and the time charges and click on **Save**.
12. If you want to print the HCFA form, click on **Yes** when asked to create it.
13. If you want to save this care plan as a template for future use, enter the name of the template when prompted to do so.

Opening an Existing Care Plan

1. Select a patient.
2. Select a doctor.
3. When you click in the "**Disease/Task**" field, you will be prompted with Choosing a Care Plan pick list. If the selected patient has existing care plans, the option **Open Existing Care Plan** will be displayed. Choose this option.
4. A Care Plan Pick List displaying the patient's existing care plans will appear. Click on the desired care plan and press **OK**. If you press **Cancel**, you will be prompted to enter a new Task/Disease.
5. You may modify the problems, goals or plan.
6. Some of the Monitoring Parameters fields contain a small button with three dots to the right. When you click on these boxes, a screen appears. You can use this screen to enter the daily readings of some parameters such as blood pressure or pulse rate. These parameters can be measured daily and recorded by clicking on these buttons. Once you have more than one daily reading, you can generate a graph and display it on your screen.
7. If you want to add progress (follow up) notes, click on **Add** or . If you want to browse through existing progress notes for this care plan, use the navigation icons at the top right corner of the screen.
8. Click on **Save** to save the plan or **Undo** to undo your changes.

Selecting From a Template

1. Select a patient.
2. Select a doctor.
3. When you click in the "**Disease/Task**" field, Choose "**Selecting from a template**" and click on **OK**.
4. A Template Pick List will be displayed. Select the desired template and click on **OK**.
5. If the patient already has an existing care plan with this template. You will be asked to either edit the existing care plan or start a new one. Click on **Yes** to create another care plan, **No** to edit the existing one.

6. The information from the template will be entered in the appropriate fields.
7. Proceed to fill out the fields or make the necessary changes as described in the sections on **Starting a New Care Plan** or **Opening an Existing Care Plan.**
8. Click on **Save** and create the invoice or print the HCFA form as desired.
9. You will be asked to update the template. Click on Yes if you want to update it, click on No if you want to leave the template unchanged.

Adding Progress Notes

For each pharmacist care plan, you may attach as many progress notes as needed.

1. Open an existing care plan.
2. Click on **Yes** when asked if you want to add new progress notes.
3. If the date of the care plan is the same as today's date, you will get an error message that "Cannot add a progress note with the same date as the care plan."
4. If the progress notes has a different date, you will be allowed to enter the progress notes in the appropriate fields.
5. Click on **Save** when finished.

Care Plan Protocols

The care plan protocols are developed to provide critical pathways and decision algorithms leading to the selection of optimal initial therapy and proper follow up criteria based on particular patient characteristics, co-existing medical conditions, severity of the disease, etc. Therefore, the protocol database provides the necessary guidelines for formulating the "plan" section of the care plan.

The program provides you with several protocols for your use when creating care plans. You will not be able to change these protocols. However, you may use them as a guide for creating your own practice-specific protocols.

Using the Protocols in the Care Plan

1. While in the care plan screen, with the disease/task selected, click on **Protocol.**
2. Click on **Yes** when asked to start a new protocol.

☞ If you have already created a protocol for this care plan, you will be asked to either review the steps or to recreate the protocol. Choose the appropriate option.

5. A list of existing protocols will be displayed.
6. Click on the desired protocol.
7. You can navigate through the steps by clicking on the buttons at the bottom of the protocol screen.

The Communications Library

The communications library is a word processing tool that can be used to create custom messages for communicating with patients, patients' guardians or caregivers, physicians, or other health care professionals. This feature will save enormous amounts of time. The library can contain an endless number of pre-formatted messages for rapid retrieval and printing.

To access the Communications Library, choose **Edit** I **Communications Library** or click on the  button in the tool bar.

Creating Messages in the Communications Library

1. In the "**Title**" field, enter the title of a note, click on the scroll bar or type a question mark **"?"** to display a selection window of all the pre-formatted messages in the library.
2. Either select the desired subject from the list or enter a new one.
3. Place the cursor in the message box. If this is a new message, enter the text. If you want to change an existing message, click on **Edit** and make any changes you wish.
4. To print the letter or for advanced editing, with the cursor placed in the message box, press on **<F2>** on your keyboard. This will launch a simple word processor which allows you to make the necessary changes. To print, choose **File** I **Print** or click on the print icon at the top of the screen.
5. Click on **Save** to save the message or **Undo** to discard your changes. You will return to the care plan where you may continue working.
8. To delete an existing message, click on **Delete**. Click on **Yes** when asked if you want to delete the message.

Accessing the Communication Library

To access and utilize the communication library while constructing a pharmacist care plan, follow the steps below:

- While in the "Care Plan" screen with a patient, doctor and disease/task having been selected, click on the **Communication** button at the bottom of the screen.
- The doctor's name will default to the one chosen in the care plan, but can be overridden. The date will default to the system date, but may also be overridden.
- If this is an existing care plan, you will see the existing communication messages, if there are any. Click on ☞ or **Add** to create a new message or click on **Edit** to edit the existing one. Click on ☜ to go to a previous message.
- If this is a new plan, in the "**Subject**" field, enter the title of a note, click on the scroll bar or type a question mark **"?"** to display a selection window of all the pre-formatted messages in the library.

- Either select the desired subject from the list or enter a new one.
- Place the cursor in the message box. If this is a new message, enter the text. If you want to change an existing message, click on **Edit**, make any changes you wish and click on **Save**.
- To print the letter or for advanced editing, with the cursor placed in the message box, press on **<F2>** on your keyboard. This will launch a simple word processor which allows you to make the necessary changes. To print, choose **File | Print** or click on the print icon at the top of the screen.
- Click on **Save** to save the message or **Undo** to discard your changes. You will return to the care plan where you may continue working.

The Knowledge Base

ApotheCare 2000 comes with an online knowledge base that will be periodically updated. Data provided range from basic reference information on selected high-risk disease states to easily-made care plans. Useful information, such as normal laboratory values or comparative safety and efficacy of certain drug categories are also included.

The knowledge base is ideal for providing on-line clinical guidelines during the process of setting up a pharmacist care plan. It mainly provides assistance and guidance in identifying "patient problems/needs," determining "pharmacotherapeutic goals," setting a "plan," and deciding upon the proper "monitoring parameters." These are the distinct components of the Pharmacist Care Plan.

Using the Knowledge Base

You can access the knowledge base in the following two ways:

- Choose **Help | Disease Knowledge** or click on  icon
- Click on Know. Base in the care plan screen after selecting a patient, doctor and disease/task.

Select from the list of disease states and follow the links on the screen to find the desired information.

Copy and Past Utility

Rather than looking up the information and retyping it into the care plan, the copy-and-past utility may be used. To accomplish this:

1. Highlight the information in the knowledge base.
2. Press **<Ctrl - C>** or right click on the mouse and select **Copy**.
3. Place the cursor where you wish to copy the information
4. Press **<Ctrl -V>** or right click on the mouse and select **Paste**.

Interventions/Outcomes

Patient Knowledge Assessment

The patient's knowledge about his or her prescription, its intended use, expected action, etc. should be assessed and an educational action must be taken during the counseling session. Documentation of this knowledge assessment and educational intervention is essential. A screen-guided checklist is provided for this purpose.

1. Choose **Interventions/Outcomes | Educational Interventions | Patient Knowledge Assessment.**
2. Select a patient.
3. Click in the "**Drug**" field. A list of the drugs currently being taken by the patient is displayed. Select the drug for which you are filling this form.
4. The "**Date**" field defaults to system's date, but you may change it.
5. If you want to browse through the patient's existing forms, use the navigation icons at the bottom of the screen.
6. Filling the form on the screen is very simple. It involves checking the boxes to indicate whether or not the patient knew each of the listed topics or questions, whether an action was taken, and a brief description of the intervention.
7. There is space at the end for extra comments. Documenting this educational process is essential.
8. Click on **Save** to save the form or **Cancel** to start over.
9. Click on **Print** to print the form. When printed, it can serve as a supporting document when billing for cognitive services.

Disease Specific Education

1. Choose **Interventions/Outcomes | Educational Interventions | Disease Specific Education.**
2. Select a patient.
3. The "**Date**" field defaults to system's date, but you may change it.
3. Click on **Diabetes Mellitus** tab, if not already selected.
4. If you want to browse through the patient's previous Diabetes education forms, use the navigation icons at the bottom of the screen.
4. Click on the applicable fields and enter your comments in the box provided.
5. Click on **Save** to save the form or **Cancel** to start over.
6. To print a report, click on **Print.**

Compliance Interventions

Filling Out a New Compliance Survey

1. Choose **Interventions/Outcomes I Compliance.**
2. Select a patient.
3. The survey date will default to system date, but you may change it.
4. Click on Assessment tab. Here you perform an analysis to assess the reasons for a patient's non-compliance. Three major problem areas are explored. In each problem area, several possibilities are identified. Click on the box(es) representing the most likely reason(s) for the patient's non-compliance.
5. Click on Intervention tab. Based on the assessment analysis and the pharmacist's knowledge of the patient's characteristics, certain steps may be taken to enhance compliance. Six major action categories are explored. In each category, several possible actions are identified. Click on the box(es) representing the intervention(s) likely to enhance the patient's compliance.
6. Click on **Save** to save the survey or **Cancel** to start over.

Displaying or Editing an Existing Compliance Survey

1. Follow the steps 1 - 2 above.
2. Use the navigation icons at the bottom of the screen to display the desired survey.
3. If you need to make any changes, click on **Edit**, make the necessary changes and then click on **Save**.

Printing a Compliance Survey

1. Display the desired survey.
2. To print a compliance assessment survey, go to the Assessment tab and click on **Print Assessment.**
3. To print a compliance intervention survey, go to the Intervention tab and click on **Print Intervention.**

Clinical Outcomes

Outcome by Patient

Data gathered during patient encounters are automatically tabulated by the system in a comparative format that can be viewed on the screen or printed in a report. Another way to look at clinical outcomes data is to graph separate sets of related parameters. The graph may be viewed on the screen or printed.

1. Choose **Interventions/Outcomes | Clinical Outcomes | Outcome by Patient.**
2. Select a patient.
3. A selection window will be displayed showing the different disease management care plans on file for this patient. Select the disease state for which clinical outcomes are to be examined.
4. To print the outcome, click on **Print** at the bottom of the screen.
5. If the care plan has monitoring values and contains more than one reading, the Graph button will be enabled. Click on **Graph.** Select the monitoring parameter you want to see first.
6. The Monitoring Parameter Chart will appear, displaying the graph for the selected parameter. To see the graph for the other parameters, simply click on the corresponding box at the top right corner of the screen.
7. To print the graph, click on **Print** at the bottom of the chart screen.

Outcome by Diagnosis

Data gathered during patient encounters are automatically tabulated by the system to inform the user how a group of patients with certain diagnosis are doing. The data can be viewed and printed.

1. Choose **Interventions/Outcomes | Clinical Outcomes | Outcome by Diagnosis.**
2 Select a diagnosis.
3. Change the date range, if you wish.
4. Specify the data range you are looking for.
5. Click on **Search.**
6. Search results will be displayed and it can be printed, if applicable.
7. You can repeat steps 2-6 to view different outcomes.

Humanistic Outcomes

SF-36 Health Survey

Improvement in a patient's quality of life (QOL) is a desired outcome that may be a direct result of the provision of pharmaceutical care. One of the most standardized and widely-used instruments for measuring QOL is the "Short Form Health Survey", also known as the "SF-36". The survey is a questionnaire that may be administered through an interview or by giving a printed document to the patient for self-administration.

These subjective measurements can be scored and analyzed as a valid and accurate assessment of the patient's perceived quality of life.

To access SF-36 Survey screen, choose **Interventions/Outcomes | Humanistic Outcomes | SF-36 Health Survey.**

Patient Satisfaction Questionnaire (PSQ18)

This is a questionnaire of 18 questions that analyzes how your patients feel about the medical care they receive.

To access PSQ18 Survey screen, choose **Interventions/Outcomes | Humanistic Outcomes | Patient Satisfaction Survey (PSQ18).**

Health Status Questionnaire (HSQ)

This is very similar to SF36 survey with three additional questions that gauge the patient's risk for depressive disorder.

To access HSQ Survey screen, choose **Interventions/Outcomes | Humanistic Outcomes | Health Status Questionnaire (HSQ).**

Diabetes Quality of Life Survey (DQOL)

This survey analyzes the diabetic patients' feelings about this disease.

To access DQOL survey screen, choose **Interventions/Outcomes | Humanistic Outcomes | Diabetes Quality of Life (DQOL) Survey.**

Filling Out a New Survey

1. Select a patient.
2. The **survey date** defaults to system's date, but you may change it.
3. Leave the "**Existing Survey**" field blank.
4. On the Scoring Screen, enter the patient's answers. Each field has a list of allowable answers. Click on each field and select the appropriate answer (leave blank if not answered).

5. A separate score is calculated automatically for each of the major categories of the survey as you enter the answers. As the patient's perception of his quality of life improves, he scores higher in one or more of the categories. To view the analysis for each category, click on the Category Analysis tab and then on the corresponding category.
6. Click on **Save** to save the survey or **Cancel** to start over.

Displaying or Editing an Existing Survey

1. Select a patient.
2. Click on the "**Existing Survey**" field and select the desired survey. The answers and scores for the survey will be displayed.
3. To edit the survey, click on **Edit**, make the necessary changes and save it.

Generating and Printing a Graph

1. Select a patient.
2. Click on **Graph** or right click on the mouse and select **Graph**.
3. A selection window appears displaying the patient's existing surveys.
4. Press **<Shift>** and click on the desired survey(s).

☞ If generating the graph for more than one survey, select surveys in chronological order so that the first survey will be printed first, then second and so on. This will make the graph easier to read.

5. Click on **OK** to display the graph.
6. Click on **Print** to print the graph.

Deleting an Existing Survey

1. Display the desired survey.
2. Right click on the mouse and select **Delete Survey**.
3. Click on **Yes** when asked if you are sure you want to delete this survey.

Printing a Blank Survey

Choose **Interventions/Outcomes | Humanistic Outcomes.**

Choose **Print (the desired survey).**

Clinical Interventions

This section of the program is designed to provide a fast and efficient documentation of clinical interventions and at the same time, print a claim form at the end of the process. Two popular claim forms suitable for billing pharmacist intervention, HCFA-1500 and PCCF (NCPA's Pharmacist Care Claim Form) have been incorporated into the ApotheCare-2000 program.

Both claim forms print on plain paper, thereby eliminating the need for pre-printed forms.

HCFA 1500 Form

Filling Out a New HCFA Form

1. Choose **Interventions/Outcomes | Clinical Interventions | HCFA 1500 forms** or click on the  button in the tool bar.
2. Select a patient.
3. The **claim date** defaults to the system date, but you may change it.
4. Select a physician.
5. The "**Accept Assignment**" question defaults to "Y", but you may change it.
6. The **dates of service** (from - to) default to the system date, but you may change them.
7. A list of applicable "**Place of Service**" codes suitable for billing pharmacist services is provided, and will be displayed when reaching this field. Select a "place of service" code from the list.
8. You may leave the "**Type of Service**" field blank in most cases. It has few applications in pharmacy-related services.
9. A database of CPT codes suitable for billing pharmacist services is provided, and will be displayed when reaching the "**CPT**" field. Select the CPT code from the list that best describes the service rendered.
10. When the cursor reaches the "**Diagnosis**" field, a list of all codes (plus their descriptions) that are currently on the patient's diagnosis profile will be displayed. Selecting a diagnosis will automatically enter it in the proper diagnosis field on the screen and will enter the corresponding ICD9 code on the printed form. You can enter up to 4 different diagnoses and up to 6 services on each form.

☞ The patient file must contain at least one diagnosis for this field to function properly. You cannot directly enter the digits corresponding to the ICD9 code in this field.

11. Enter the professional fee for the service provided in the "**charges**" field. Several

services provided may be billed on a single claim, each with its own date(s) of service, CPT code, diagnosis, and fee.

12. The total charges and the balance due will be automatically calculated.
13. Click on **Save** to save the form or **Cancel** to start over.

☞ To create a new HCFA form for the same patient while still in the HCFA screen, click on **New** in the bottom panel.

Displaying or Editing an Existing HCFA Form

1. Follow the steps 1 - 3 above.
2. Use the navigation icons at the bottom of the screen to display the desired form.
3. To edit the form, click on **Edit**, make the necessary changes and then click on **Save**.

Printing the HCFA Form

1. Fill out a new form or display an existing form.
2. Click on **Print Form** in the bottom panel.

☞ If the form is new and has not been saved, you will be prompted to save it before you can print it.

PCCF Form

Filling Out a New PCCF Form

1. Choose **Interventions/Outcomes | Clinical Interventions | PCCF forms.**
2. Select a patient.
3. In the **Submit to** field, select an insurance plan from the drop down list. The list will display the plans for the patient selected.
4. The screen consists of four tabs that display the questions in four categories: Reasons for Services, Professional Services, Recommendations, and Results of Services. Click on each tab and mark the appropriate check boxes.
5. For each box marked, the corresponding billing code will appear in the Billing Codes section. You can select up to 3 codes for each category.
6. For services rendered, enter a fee in the corresponding box.
7. If there are drugs involved, select a drug from the drop down list in the corresponding boxes. You have the option of displaying the drugs by either drug name or the NDC number by clicking on the **Display Drug Name (NDC).**
8. To enter a discussion for this claim, click on **Discussion** and enter your text in the box that appears.
9. Click on **Save** to save the form or **Cancel** to start over.

Displaying or Editing an Existing PCCF Form

1. Follow the steps 1 - 2 above.
2. Use the navigation icons at the bottom of the screen to display the desired form.
3. To edit the form, click on **Edit**, make the necessary changes, and click on **Save.**

Printing the PCCF Form

1. Fill out a new form or display an existing form.
2. Click on **Print Form** in the bottom panel.

☞ If the form is new and has not been saved, you will be prompted to save it before you can print it.

Reconciliation

Single Insurance Reconciliation

This feature allows you to manage all invoices generated and amounts due for a specific insurance plan.

1. Choose **Utilities | Single Insurance Reconciliation.**
2. Select an insurance from the drop down list.
3. All transactions that are currently billed to the selected insurance are displayed with total charges, total payments and final balance displayed at the bottom of the screen.
4. To enter a new payment, highlight a transaction and then either click on **Enter Transaction Payments** or double click on the highlighted transaction.
5. If the transaction has been billed, you will be prompted to enter a payment amount. After a payment is entered and posted, you may select a party from a drop-down list to bill at that time or just close the payment entry screen and select another party at a later time.
6. To view the HCFA form for a particular transaction, highlight it in the grid and click on **View Transaction Detail.**
1. You may print the insurance reconciliation by clicking on **Print** at the top right corner of the screen.

Single Patient Reconciliation

This feature allows you to manage all invoices generated and amounts due for a specific patient.

1. Choose **Utilities | Single Patient Reconciliation.**
2. Select a patient.
3. All transactions generated for this particular patient are displayed with total charges, total payments and final balance displayed at the bottom of the screen.
4. To enter a new payment, highlight a transaction and then either click on **Enter Transaction Payments** or double click on the highlighted transaction.
5. If the transaction has been billed, you will be prompted to enter a payment amount. After a payment is entered and posted, you may either select a party to bill from a drop-down list at that time or just close the payment entry screen and select another party at a later time.
6. To view the HCFA form for a particular transaction, highlight it in the grid and click on **View Transaction Detail.**
7. You may print the patient reconciliation by clicking on **Print** at the top right corner of the screen.

Viewing Multiple Insurances Balances

This feature allows you to view the payment history of all transactions currently billed to insurances.

1. Choose **Utilities I View Multiple Insurances Balances.**
2. The transaction history of all insurance plans with outstanding amounts/invoices will be displayed. An aging analysis is built in. Totals are displayed at the bottom of the screen.
3. To print a report, click on **Print** at the top right corner of the screen.

Viewing Multiple Patients Balances

This feature allows you to view the payment history of all patients.

1. Choose **Utilities I View Multiple Patients Balances.**
2. The transaction history of all active patients will be displayed with an aging analysis built in. Totals are displayed at the bottom of the screen.
3. To print a report, click on **Print** at the top right corner of the screen.

Invoices

Printing Outstanding Invoices

This feature enables you to print outstanding invoices for all patients, a single patient or a single insurance.

1. Choose **Utilities I Print Outstanding Invoices.**
2. In the **Select Type** field, select one of these options: All, Single Patient or Single Insurance.
3. If the Single Patient or Single Insurance option is selected, the **Select Name** field will appear. In this field, select the patient or plan name respectively from the drop down list.
4. Click on **Print** to print all invoices under the selected option that have a balance greater than zero along with their corresponding HCFA or PCCF forms.

Purging Invoices

This feature enables you to delete old invoices that have a balance of zero or less.

1. Choose **Utilities I Purge Invoices.**
2. Choose **Purge** or **Close.**
3. If Purge is selected, all invoices with a balance of zero or less will be purged (deleted) along with their corresponding HCFA or PCCF forms.

Queries

At the heart of ApotheCare-2000 is a robust array of integrated clinical databases. This advanced information technology provides instant answers to very complicated clinical problems that face clinicians (physicians, pharmacists, nurses, etc.) in their daily practice.

ApotheCare-2000 utilizes the power of its clinical databases to perform the "Drug Use Evaluation" process. While this process happens in the background, for the "Query" these evaluations are brought to the foreground under the pharmacist's total control.

You can perform queries based on the following:

- **Adverse Reactions**
- **Disease or medical condition**
- **Patient's medical conditions**

You may also query the database to obtain

- **Drugs clinical information**
- **Drug class information**

Adverse Reactions Query

When a patient is involved in this query's criteria, the objective is to identify the drug(s) present in that patient's regimen that may cause a given ADR. Otherwise, the query's objective is to produce a listing of therapeutic drug classes and selectively identify members of each therapeutic class and the likelihood to which they might cause a given ADR.

1. Choose **File** I **Query Database** or click on the  button in the tool bar and choose **Adverse Reactions**.
2. Select ADR from the drop down list or begin typing.
3. When all pertinent ADRs have been listed, you may select a specific patient or generally query the entire drug database.

☞ To remove the patient, either select another patient from the drop down list or highlight the selected patient and press **<Delete>**.

4. Upon selecting a patient, the system will initiate the query and the patient's regimen will appear on the left side of the screen.
5. Each drug on the left may be separately highlighted. Once you select a drug, all other drugs in the same chemical class appear to the right.

6. Those with the potential for causing one or more of the chosen ADRs will appear in red. The relative frequency of the ADR is further defined in columns pertaining to each ADR. The agents belonging to that chemical class can be compared quite easily at this point and the best choice identified.
7. If performed without selecting a patient, click on **Query Clinical Database** and the drug classes appear on the left for those with at least one offending agent.
8. Highlighting any agent on the right side activates the buttons for **Indications, Contraindications, Interactions,** and **Other ADRs,** just as if you are performing a drug query.

☞ To adjust the number of lines displayed in the boxes, you can use the scroll buttons at the bottom left corner of the screen.

☞ The numbers in front of the ADRs in the view box in the top left correspond to the order they are displayed. For instance, ADR 1 pertains to #1 in the view box.

☞ To clear the selected ADR list, you either click on the button next to this field or highlight the entry in the field and press <**Delete**>.

Disease Query

The objective of this query is to provide a list of all possible drug treatments for a selected medical condition (diagnosis), while in the meantime provide clinical alerts due to any of a number of assumed co-existing conditions.

1. Choose **File** I **Query Database** or click on the  button in the tool bar and choose **Disease.**
2. Access a disease by name or by ICD9 code, e.g. "Essential Hypertension" or "401." You may type in all or a portion of the name or the ICD9 code. A list of diseases matching the specified value will appear. Click on the desired disease.
3. The cursor will move to the "**Add New Conditions**" field where you may add other co-existing conditions, e.g. congestive heart failure, asthma, etc.
4. When the list is complete, click on **Search Drugs Database.** The system will then list all the FDA-approved drugs to treat the condition in question.
5. The suggested daily dose, frequency, added benefits, contraindications, and potential allergies are displayed.
6. Drugs listed in red are contraindicated due to a co-existing condition or the potential to cause an allergic reaction.
7. Further drug information can be obtained by double clicking on the agent in question.
8. Return to the main query by clicking on **OK.** For long lists of drugs, use the scroll bar on the right.
9. For new queries, you can clear the underlying conditions by clicking on the button and/or highlighting the entry in the "**Disease**" field and pressing on <**Delete**>.

☞ Abbreviation translation is used for an individual drug. It is for reference only.

Drug Query

The objective of this query is to access full prescribing information on any drug in the database and selectively zero in on the information category of special interest. The initial clinical display provides the selected drug's indications, recommended daily dose for each indication and the administrative frequency.

1. Choose **File | Query Database** or click on  button in the tool bar and choose **Drug**.
2. Select a drug.
3. Use the tabs to obtain desired information.
4. Specific interactions may be further investigated by double clicking on the desired choice.

Drug Class Query

This allows you to query the drug database by a class of drugs.

1. Choose **File | Query Database** or click  button in the tool bar and choose **Drug Class**.
2. Select a Drug Class by entering the first few letters of the class name and selecting it from the drop down list that appears.
3. The four tabs display the information for all drugs in the selected class.
4. In the Contraindications tab, select a disease to check if it contraindicates with any of the drugs in the class.
5. Specific Interactions may be further investigated by double clicking on the desired choice.

Patient Query

The objective of this query is to provide a list of all possible drug treatments for a given medical condition (diagnosis) of a selected patient, while in the meantime provide clinical "alerts" due to any of the patient's co-existing conditions.

1. Choose **File | Query Database** or click on the  button in the tool bar and choose **Patient.**
2. Select a patient.
3. The patient's diagnosis history appears. Select the desired diagnosis.

4. All other co-existing conditions appear in the box on the left. The patient's drug allergies are listed in the box on the right. Instantly, all drugs indicated for treatment of the desired condition appear.
5. Dose, frequency, benefits, contraindications, and allergy alerts appear.
6. Contraindicated drugs appear in red. Drugs are organized by chemical class.
7. To display the patient's current therapy used to treat the desired condition, click on the button at the bottom of the screen.
8. To obtain additional drug info, double click on the desired agent.

Tools

Protocol Editor

To access the Protocol Editor, choose **Edit** | **Protocol Editor** or click on the  button in the tool bar.

Adding a New Protocol From Scratch

The best way to create a protocol from scratch is to draw it on a sheet of paper as a flow chart. Typically, a flow chart consists of steps to be performed one after another. Some of the steps may be conditional steps which will be performed depending upon the result of a previous step. Some other steps may have to wait for an action or an evaluation by the caregiver. For the purpose of this help topic, we will use the name "Step" to indicate an action which will be performed in the care plan process. We will use the name "Decision" to indicate a decision that the caregiver must make depending on a certain condition. Typically the condition will be set to have a Yes/No answer. A "Yes" answer will lead to a step and the "No" answer will lead to another step. The condition may be evaluated by searching the patient database for a specific condition such as a specific disease state in his/her diagnosis profile. Finally, we will use the word "Continue" or "Cont" to indicate a break in the treatment process which will continue at a later time after doing the necessary evaluation and follow up.

Once you finish drawing the flow chart, give each step a number starting from number 1 and continue with the following instructions:

1. Go to Protocol Editor.
2. Click on **New**.
3. If you did not specify a protocol title in the box at the top of the screen, you will be prompted to enter a title now.
4. The protocol editor opens to step 1 as default.
5. Enter the description of the current step. For advanced editing using the built-in word processor, press <F2>.
6. In the "**Next**" field, enter the number of the step which would follow the current step.
7. If the current step contains a decision, enter the numbers of steps that follow it in the fields "**Yes**" and "**No**".
8. If you need to put a break in the treatment for the purpose of evaluation or follow up, enter a number in the "**Cont**" field. By doing so, the current step will contain a **Cont** button as well as an **End** button.
9. You can specify a help screen for each step by entering the number associated with the help screen in the "**Help**" field. Once you save the step and double click on this field, you will get another window allowing you to enter more text, tables, etc. This help screen will subsequently be accessible to any other step in the protocol that

contains the number associated with the help screen in its "Help" field.

10. At each step, you can perform a search in the program databases. To specify the search criterion, click on the "**Search**" field and select the database you want to search in from the drop down list. In the "**For**" field, specify what you want to search for. For example, you may want to search for a particular code in the ICD9 database.
11. To go to the steps assigned to Next, Yes or No, Cont or Help, you must first click on Save to save the current step and then double click on these fields.
12. To go to a specific step, enter the number assigned to that step in the "**Step**" field. Clicking in the description box will take you to that step.
13. You can view the existing protocols, which can be helpful in devising a new protocol, by clicking on **Protocol**.
14. Click on **View** to display the protocol that you are working on, enabling you to discover and correct errors. You can also go through the steps in their logical order by using the navigation buttons in the bottom left corner of the screen or pressing on **<Page Down>** or **<Page Up>** on your keyboard.

Adding a New Protocol Using an Existing Protocol

1. Highlight the protocol that you want to use as the basis of your new protocol.
2. Click on **Options** and choose **Copy**.
3. Enter a title when asked to enter the title of the new protocol.
4. The new protocol will be added to the list.
5. To make changes to the protocol, either double click on it or highlight it and click on **Edit**. Make the necessary changes and save.

Checking a Protocol for Errors

You can only check the protocols you have created. The default protocols cannot be checked.

1. Highlight the desired protocol in the list.
2. Click on **Options** and select **Check**.
3. A screen appears giving you a summary of the steps in the protocol. The unlinked steps or any other error found will be displayed in red.
4. Double click on the problematic step and you will be taken to that step to make the correction.

Editing an Existing Protocol

1. The default protocols are displayed in bold and blue letters. You cannot modify them. The rest are in regular print, which you are allowed to edit.
2. Highlight the desired protocol and click on **Edit** or double click on it in the list.
3. Make the necessary changes and save.
4. We strongly recommend that you check the protocol for errors to make sure that no problems have been introduced.

Deleting a Protocol

You can only delete the protocols you have created. The default protocols cannot be deleted.

1. Highlight the desired protocol in the list.
2. Click on **Options** and select **Delete**.
3. Click on **Yes** when asked if you want to delete this protocol.

Displaying a Protocol

Highlight the desired protocol. Click on **Options** and choose **View**. Navigate through the steps by clicking on **Next**. The **End** button will be displayed on the last step of the protocol.

Importing ASAP-Formatted Data

- If you are using the stand-alone version of ApotheCare-2000 or if you are using a pharmacy software system other than Etreby 2000, you can import the data from your pharmacy dispensing system into the ApotheCare 2000 program by using the import utility. This is possible only if your dispensing system is capable of exporting the prescription data in the ASAP format.

1. Choose **Utilities | Import**.
2. You will be prompted to specify the path to the file containing your pharmacy data in ASAP format. You must have already created this file from your pharmacy system.
3. The patient data and history will be imported into the program.
   - During importing of the patient data, the program checks for the existence of the patient in the ApotheCare-2000 patient database by attempting to match the patient's ID, last name, first name, and date of birth. If it does not find a match, it will add a new patient record.
   - During importing of the prescription history, the program attempts to match the NDCs of the drugs in the patient's prescription history to the NDCs of the drugs which currently exist in the ApotheCare-2000 drug database. If it does not find a matching drug, the program will display a message that one of the drugs was not found in the

database and will not add the corresponding prescription to the patient therapy. In this case, you should manually add the missing prescription to the patient current therapy. You may need to first add the missing drug to the ApotheCare-2000 drug database if it happens to be a valid drug.

- If you are using the integrated version of ApotheCare-2000 that is interfaced with Etreby 2000 pharmacy system, you can import the patient and prescription data from the pharmacy program without using the import utility.

Interface With Etreby 2000 Pharmacy System

☞ This section applies to the DOS-based Etreby 2000 Pharmacy System only.

ApotheCare 2000 uses the latest state of the art databases to achieve a high performance & robust data. Since it was not possible to do a full one to one compatibility with the pharmacy DOS version, the interface was limited to the patient, allergy, OTC profile, diagnosis, and Prescription history.

How to Interface

1. Choose **Edit | Configuration.**
2. In the box labeled "Etreby Pharmacy System Directory," either type in the full path for the ET2000 sub-directory which has the pharmacy information or click on ... to navigate to the ET2000 sub-directory.
3. Click on **Save & Exit.**

How the Interface Works

1. When entering new patients in ApotheCare 2000, you will have the choice of importing the patient from the ET2000 program.
   - You will get a list of the matching patients (the match can be done based on the family name or the patient's ID).
   - Upon selecting the patient, the demographic, allergy, OTC, and diagnosis profiles for the selected patient will be imported into ApotheCare 2000 databases. Any further changes in the Pharmacy data will not be reflected on the ApotheCare data. You will have to update the ApotheCare data as well.
2. When doing a Drug Regimen review, you will have the option of choosing from the pharmacy prescriptions.

Etreby Web Site

You can access the Etreby web site to get the latest information about our products and services. To be able to do that, you must have access to the Internet through an Internet Service Provider (See the section on "How to Connect to the Internet" in the next chapter)

1. Connect to the Internet via your modem (unless you have a permanent connection).
2. Choose **Help ! Etreby Home Page** or click on  button in the tool bar.
3. The default browser on your computer will be launched taking you to the Etreby home page.

Updating the Program

Downloading the Update

If you have access to the Internet, you can download the latest update to the program as well as our clinical databases from the Etreby web site. The download time can take from 15 to 25 minutes depending on the size of the update file. We recommend that you download the update at times when the Internet traffic is not very high. This is typically early in the morning or early in the evening.

If you do not have Internet access, you need to contact an Internet Service Provider (ISP) to establish an account. There are now several ISPs available to you that offer unlimited Internet access at a low monthly cost. If you need assistance finding a suitable ISP, please contact Etreby.

How to Connect to the Internet:

If you do not have a permanent connection to the Internet, you must first dial up via your modem before you can download the update. To automatically get prompted to make this connection, follow the steps below:

1. Go to **Start | Settings | Control Panel** on your computer.
2. Double click on the **Internet** icon.
3. Click on the **Connection** tab.
4. Select the option **Connect to the Internet As Needed** (or **Connect to the Internet Using a Modem** in some versions of Windows 95).
5. If you have more than one dial up connection, select the one you want to use for dialing up. If you have only one, it will become the default connection (in some versions of Windows 95, you need to click on the **Settings** button first before selecting the desired connection).
6. From this point on, any time you launch a web browser such as Netscape Navigator or Internet Explorer, you will be prompted with the Dialup Connection box. Click on **Connect** to get connected to the Internet.

If you don't set up a connection as outlined above, every time you want to launch a browser to download the update, you must manually make the connection first in the following manner:

1. Double click on **My Computer** icon on your desktop.
2. Double click on the **Dial up Networking** folder and then on the desired connection.
4. Click on **Connect** in the dialog box that will appear.

How to Download the Update:

1. Create the sub-directory **AP2000\Update** on your hard drive, if it has not already been created.
2. If you have Microsoft Internet Explorer installed on your system, go to **Help** | **Download Update** or click  button in the tool bar. This will launch your default browser.

   ☞ If you do not have Internet Explorer, you need to manually launch the browser on your system. Then in the address box, enter **http://www.etreby.com/private.**

   ☞ If you have not already made an Internet connection as explained in the section "How to Connect to the Internet," you will get an error message that the browser is unable to locate the server.
3. Before you can access the Etreby Download page, you will be asked to enter a user name and password. The user name is your **Etreby account number** and the password is the **first four digits of your ApotheCare CD identification number.**
4. If you are running Internet Explorer, click on the corresponding button on the page. On the next page that appears, click on the link **Download Update File** and save the update file in the **\AP2000\UPDATE** directory on your system.
5. If you are running another browser, click on the corresponding button on the page. On the next page that appears, click on the link **Download Update File.** You must save the file under the name **updap.dat** in the **\AP2000\UPDATE** directory on your system.
6. Once the update has been downloaded and you no longer need to be online, exit out of your browser and disconnect your Internet connection.

Applying the Update

1. Choose **Help** | **Apply Update.**
2. A selection will be displayed for the possible data to update.
3. You may exit without applying the update by clicking on **Cancel.**
4. All selections are marked by default. You have the option of deselecting any item that you don't want to update. However, we strongly recommend that you select all updates.
5. Click on **OK.** The ApotheCare program will be terminated after starting the update process. Be sure to save your work before applying the update.
6. The update results will be displayed at the end.

Loading Update From CD

This menu option has been added to update the program and the databases from a CD when downloading the update from the Etreby web site is not possible. This option will be used according to Etreby update needs and will not replace downloading the update from the web site.

1. Put the update CD in the CD-ROM drive of your computer.
2. Choose **Help | Load CD Update**.
3. The program will be updated.

Preferences

Desktop

The Tool Bar

The tool bar contains several buttons to serve as short cuts to the most commonly performed functions of the program. If you prefer to remove it and have a larger workspace instead, do the following:

1. Choose **Edit.**
2. Deselect **Tool Bar** in the menu.

The Status Bar

The status bar contains information about the active screen. You can opt to remove it as follows:

1. Choose **Edit.**
2. Deselect **Status Bar** in the menu.

Desktop

You can specify your preferences for the color, font or text background that you see on the screen. To change these attributes, follow the steps below:

1. Choose **Edit | Preferences.**
2. Click on desktop tab to see the window preferences.
3. Modify the color, font or text background as desired by clicking on the corresponding button.
4. Click on **Save** to save the preferences or mark the field **"Use Default"** to go back to the original settings.

System Configuration

The system configuration displays the system's date and the hourly rate for services rendered as well as the information about the pharmacy and pharmacist. This information will be used mainly for billing purposes.

1. Choose **Edit | Configuration.**
2. If you need to make changes, click on **Edit.**
3. Enter the default hourly rate that will be used to bill for services rendered.
4. Today's date is defaulted to the system date. To change today's date, deselect the box "**Use System Date**" and enter the new date.
5. Click on **Save** to save your changes or **Cancel.**

Technical Support

Telephone technical support is available Mondays through Fridays, 9 a.m.- 6 p.m. (PST), Saturdays 9 a.m. - 2 p.m. (PST). To obtain support:

- Call us at (800) 292-5590
- Send us a fax at (714) 533-1157
- Send us an email to info@etreby.com
- Visit our web site at http://www.etreby.com

When you contact us for support, prepare to give us your name, pharmacy name, version # of the program and details of your problem.

Getting Information About Your Program

If you ever require technical assistance, you will likely be directed to get information about your program before help is given. The system expiration date, mode, version and the last update are recorded here.

1. Choose **Help | About.**
2. The system expiration date and specifications will be displayed.